

REMARKS

Claims 1-33 are currently pending in the subject application, and are presently under consideration. Claims 1-4, 9-11, 13-16 and 22-33 are rejected. Claims 5-8, 12 and 17-21 have been indicated as allowable. Claims 1, 9, 15, 18-21, 25-26 and 31 have been amended. Claim 17 has been cancelled. New claim 34 has been added. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Rejection of Claim 30 Under 35 U.S.C. §112, First Paragraph

Claim 30 stands rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. The Examiner states that the specification does not explain how peaks are reduced as claimed in claim 30. Applicant's representative respectfully disagrees. Paragraph 37 of the specification describes a PAR reduction component 124 (FIG. 5) that can reduce peak signal levels of the input signal through clipping or inclusion of additional signals. Both clipping and the addition of signals to reduce peaks of an input signal are well known techniques.

For the reasons described above, it is respectfully requested that the rejection with respect to claim 30 be withdrawn.

II. Rejection of Claims 1-4, 9-11, 13-16, 22-29 and 31-33 Under 35 U.S.C. §102(e)

Claims 1-4, 9-11, 13-16, 22-29 and 31-33 stand rejected under 35 U.S.C. §102(e) as being anticipated by US 2004/0263245 A1 (Winter, et al.). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 15 has been amended to include the allowable elements of claim 17, and claim 17 has been cancelled. Claims 18-22 have been amended to depend from claim 15. Therefore, claim 15 and claims 16 and 18-24, which depend therefrom should be allowable. Allowance of claims 15-16 and 18-24 is respectfully requested.

Claim 1 has been amended to recite a supply control device that varies a supply voltage of the switching amplifier between a plurality of fixed voltage supply levels based on a characteristic of the input signal relative to a threshold level.

Claim 9, depends from claim 1 and has been amended to recite a digital control device that analyzes the input signal and builds a fixed voltage supply level adjustment profile for dynamically modifying the supply voltage to the switching amplifier in response to changes in the characteristic of the input signal relative to the threshold level.

Claim 25 has been amended to recite means for modifying the supply and/or bias of the means for amplifying between a plurality of fixed voltage supply levels in response to changes in a characteristic of the input signal.

Claim 27, depends from claim 25 and has been amended to recite means for building a fixed voltage supply level adjustment profile for dynamically modifying the supply voltage to the switching amplifier in response to changes in the characteristic of the input signal relative to a threshold level.

Claim 31 has been amended to recite determining a fixed voltage supply level adjustment profile based on changes in at least one characteristic associated with an input signal and amplifying the analog binary waveform with a switching amplifier into an amplified output signal while concurrently adjusting a supply and/or bias level of the switching amplifier between a plurality of fixed voltage supply levels based on the fixed voltage supply level adjustment profile.

Winter et al. discloses an amplifier system that switches between operation in a polar mode and a linear mode. In the linear mode, the amplifier systems operates as a linear amplifier providing a signal of constant amplitude to a supply terminal of an amplifier, and a composite input signal to an input terminal of the amplifier. In the polar mode, the amplifier system operates as a polar amplifier providing an amplitude modulated component of the composite input signal to the supply terminal of the amplifier and a phase modulated component of the composite input signal to the input terminal of the amplifier. The amplitude modulated component is an information bearing signal. Therefore, the amplifier system of Winter et al.

switches the supply terminal between a constant amplitude signal in the linear mode and an amplitude modulated signal in the polar mode.

Winter et al. does not disclose varying a supply voltage of a switching amplifier between a plurality of fixed voltage supply levels based on a characteristic of the input signal relative to a threshold level, as recited in amended claim 1. Therefore, Winter et al. does not teach each and every element of claim 1, and therefore does not anticipate claim 1 and claims 2-14, which depend therefrom.

Winter et al. does not disclose means for modifying the supply and/or bias of the means for amplifying between a plurality of fixed voltage supply levels in response to changes in a characteristic of the input signal, as recited in amended claim 25. Therefore, Winter et al. does not teach each and every element of claim 25, and therefore does not anticipate claim 25 and claims 26-30, which depend therefrom.

Additionally, Winter et al. does not disclose building or determining a fixed voltage supply level adjustment profile, as recited in amended claims 9, 27 and 31. Winter et al. does not disclose the use of a plurality of fixed supply voltage levels and, therefore would not have a use for a fixed voltage supply level adjustment profile. Furthermore, Winter et al. does not disclose the amplifying the analog binary waveform with a switching amplifier into an amplified output signal while concurrently adjusting a supply and/or bias level of the switching amplifier between a plurality of fixed voltage supply levels based on the fixed voltage supply level adjustment profile, as recited in amended claim 31. Therefore, Winter et al. does not teach each and every element of claims 9 and 27, and does not anticipate claims 9 and 27. Additionally, Winter et al. does not teach each and every element of claim 31, and therefore does not anticipate claim 31 and 32-34 which depend therefrom

For the reasons described above, claims 1-4, 9-11, 13-16, 22-29 and 31-33 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

III. New Claim 34

New claim 34 has been added, which depends from claim 1, and recites that the switching amplifier comprises at least one of inhibiting electronics, harmonic termination and zoning filers that facilitate the reproduction of a desired amplified output signal within a desired spectrum. Winter et al. does not disclose the use of any of inhibiting electronics, harmonic termination and/or zoning filers. Therefore, Winter et al does not anticipate claim 34, and claim 34 should be patentable over Winter et al.

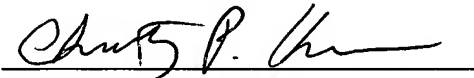
CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date 7/29/05


Christopher P. Harris
Registration No. 43,660

CUSTOMER No.: 26,294

TAROLLI, SUNDHEIM, COVELL, & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVELAND, OHIO 44114-1400
Phone: (216) 621-2234
Fax: (216) 621-4072